

REMARKS

Applicant respectfully requests reconsideration in view of the amendment and following remarks. Support for amended claim 1 for the maximum amount for the bulk density can be found in the original claim 4.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Spencer et al. U.S. Patent No. 5,633,419 ("Spencer") for the reasons set forth in item 3 of the Office Action mailed 3/22/04. Claims 1-3 and 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Marchand et al. U.S. Patent No. 4,910,272 ("Marchand") for the reasons set forth in item 4 of the Office Action mailed 3/22/04. Claims 1 and 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Heinrich et al. U.S. Patent No. 5,292,837 ("Heinrich") for the reasons set forth in item 5 of the Office Action mailed 3/22/04. The applicant respectfully traverses these rejections.

In Marchand the following are mixed together:

A: Inorganic oxide (Silica)

B: Organomagnesium Material

C: Organic Hydroxy component

D: a reducing halide source such as Aluminium Alkyl

E: a transitional metal component, such as M (IV) component.

The difference to the applicant's invention is that applicant does not use component (A), inorganic oxides (Silica) as a solid support for the catalyst. There is a difference using a catalyst-system with or without a solid support. The use of A is essential and key element in Marchand's

process. The polymer morphology (e.g. bulk density and average particle size) is determined by A. The polymers obtained by using the catalyst of the "Comparative Experiment A (col. 7)" - a catalyst system without Silica- compared with the obtained polymers using catalyst systems with silica (Example 1 to 7) are significant different. Therefore, it is clear that the morphology of the polymer is influenced by the kind of silica and the average particle size of the silica which was used. Marchand tried to get a broad range of polymers by using different Silica-types and sizes. Marchand teaches away from the applicant's claimed invention. The applicant is able to control the powder morphology without using components like A. According to the invention, the particle size of polymer correlates with the particle size of the catalyst solid because of the replication behavior due to the multigrain behavior (see page 4, line 17 to 20). For the above reasons, this rejection should be withdrawn.

Spencer claims a polymerization process very similar to Marchand. Spencer, like Marchand claims a process based on a catalyst with the composition

A: Silica,

B: Magnesium halide such as a magnesium dichloride,

D: Group (IV) or (V) metal component such as TiCl_4 and

E: Group 2 or 13 organometal compound such as alkyl aluminium halide.

The use of A and B is essential and key element in Spencer's process. As stated above, the polymer morphology is determined by A.

The applicant's process is much simpler and more flexible. The applicant is able to control the powder morphology without using components like A and B. The applicant uses

“consisting of” language which would exclude the use of a support such as silica. The use of silica as an essential component is discussed above with Marchand.

Spencer mentions MFR (190/2) in all examples with 0.05 g/10min as minimum (Comp. Ex. 7). In the applicant’s case MFR (190/15) 2g/10min means that the applicant can not obtain any MFR (190/2, $\text{MFR (190/2) = 0g/10min}$).

Heinrich claims a polymerization process to give coarse particles with high bulk density. He uses a supported Ziegler Natta catalyst. The bulk density (“BD”) shown in the 17 examples is a minimum of at 0.29g/cm^3 . The applicant’s claimed invention requires a maximum of 0.28g/cc for the BD. Therefore, Heinrich teaches away from the applicant’s claimed invention. Furthermore, Heinrich’s morphology control is given by magnesium compound, which is similar to B in Spencer. This is different from the applicant’s invention.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Application No.: 09/787875

Docket No.: 05587-00311-US

A Notice of Appeal has been filed. Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 05587-00311-US from which the undersigned is authorized to draw.

Respectfully submitted,

By 

Ashley I. Pezzner

Registration No.: 35,646

CONNOLLY BOVE LODGE & HUTZ LLP

1007 North Orange Street

P.O. Box 2207

Wilmington, Delaware 19899

(302) 658-9141

(302) 658-5614 (Fax)

Attorney for Applicant